1. A method carried out in an arrangement that includes a switch, and N collections, each collection i including a set of terminals T_i and a set of resources SOR_i that includes one or more serially-connected shared overloadable resources SOR_i^J, interposed between terminals T_i and said switch, j being an index that identifies a particular shared overloadable resource in set SOR_i, and where each call that is established between a terminal in set T_i and said switch occupies an overloadable resource element, $SOR_i^J(q)$ in each resource j in set SOR_i, where q=1, 2, ... or Q^J, and Q^j is a number corresponding to number of shared overloadable resource elements in resource j, said method being carried out in response to an attempt by a terminal in set T_k to establish a communication connection with said switch, comprising the steps of:

selecting a value of index j in SOR_k^J that was not previously selected;

engaging a mechanism that works to maintain a high probability that an element $SOR_k^j(q)$ exists that is unoccupied, by dropping or not dropping a call associated with SOR_k;

when said mechanism decides to drop a call,

choosing a call as a selected call to be dropped,

dropping the selected call, and

establishing a connection for said terminal in set T_k, unless the connection sought to be established by said terminal in set T_k, is the selected call; and

when said mechanism does not decide to drop a call, returning to said step of selecting, when unselected values index j in SOR_k^J remain, and establishing said connection for said terminal in set T_k, when no unselected values index j in SOR_k^J remain.

2. The method of claim **1** wherein said mechanism, when considering resource SOR_k^J, determines whether to drop a call by:

determining whether number of unoccupied overloadable resource elements in resource SOR_k^J is below a second preselected threshold $K2^J$;

when said number of overloadable resource elements is below threshold $K2^J$ but not below threshold $K1^J$, drops a call when a first algorithm for deciding whether to drop a call reaches a decision to drop a call; and

when said number of overloadable resource elements is below threshold $K1^J$, drops a call when a second algorithm for deciding whether to drop a call reaches a decision to drop a call.

3. The method of claim **1** where said terminal in set T_k that is attempting to establish a communication connection with said switch is considered a call associated with SOR_k that is included in calls that said mechanism considers to drop or not to drop.

4. The method of claim **2** where said mechanism, when it decides to drop a call that occupies an element in resource SOR_k^J, chooses a call to be dropped pursuant to a prespecified schema.

5. The method of claim **4** where said prespecified schema considers types of calls, and durations of calls.

6. The method of claim **2** where said first algorithm is deterministic or probabilistic, and said second algorithm is deterministic or probabilistic.

7. The method of claim **2** where said first algorithm follows a probability function that increases likelihood of said first algorithm reaching a decision to drop a call as said number of unoccupied overloadable resource elements approaches $K1^J$.

8. The method of claim 7 where value of said probability function is essentially 0 when said number of unoccupied overloadable resource elements is $K2^J$, value of said probability function increases as said number of unoccupied overloadable resource

elements is reduced, and value of said probability function is essentially 1 when said number of unoccupied overloadable resource elements is $K1^j$.

9. The method of **1** where said serially-connected shared overloadable resources comprise one or more links, with nodes interposed between links, with one of said links connected to said switch, and said method being practiced in one or more elements included in a set that includes said switch and said nodes.

10. A method carried out in an arrangement that includes a switch, and N collections, each collection i including a set of terminals T_i and a set of resources SOR_i that includes one or more serially-connected shared overloadable resources SOR_i^j, interposed between terminals T_i and said switch, j being an index that identifies a particular shared overloadable resource in set SOR_i, and where each call that is established between a terminal in set T_i and said switch occupies an overloadable resource element, $SOR_i^j(q)$ in each resource j in set SOR_i, where q=1, 2, ... or Q^j, and Q^j is a number corresponding to number of shared overloadable resource elements in resource j, said method being carried out in response to an attempt by a terminal in set T_k to establish a communication connection with said switch, comprising the steps of:

selecting a value of index j in SOR_k^j that was not previously selected;

determining whether a number of unoccupied overloadable resource elements in SOR_k^j is below a respective first preselected threshold $K2^j$;

when said step of determining concludes in the affirmative, engaging a mechanism that works to maintain a high probability that an element $SOR_k^j(q)$ exists that is unoccupied;

when said step of determining concludes in the negative, returning to said step of selecting when unselected values index j in SOR_k^j remain; and

establishing said connection for said terminal in set T_k, unless said mechanism chose to block said attempt.

11. The method of claim **10** wherein said step of selecting a value selects an index j based on occupancy of SOR_k^J.

12. The method of claim **10** wherein said mechanism drops a call that occupies a resource element in SOR_k^J, or a call that, if established, occupies a resource element in SOR_k^J, when a variable that can take on a first value in accordance with a selected probability function does take said first value.

13. The method of claim **12** where said probability function is a function of number of unoccupied overloadable resource elements in SOR_k^J.

14. The method of claim **13** where said probability function is a function that has a value that is essentially 0 when said number of unoccupied overloadable resource elements in SOR_k^J is $K2^J$, and increases toward 1 with decreasing number of unoccupied overloadable resource elements in SOR_k^J, reaching essentially 1 when said number of unoccupied overloadable resource elements in SOR_k^J is $K1^J$, which is less than $K2^J$ but significantly greater than 0, and staying at a value that is essentially 1 when said number of unoccupied overloadable resource elements in SOR_k^J is lower than $K1^J$.

15. The method of claim **12** where said mechanism, when it decides to drop a call that occupies an element in resource SOR_k^J, chooses a call to be dropped pursuant to a prespecified schema.

16. The method of claim **15** where said prespecified schema considers types of calls, and durations of calls.

17. The method of **10** where said serially-connected shared overloadable resources comprise a one or more links, with nodes interposed between links, with one of said links

connected to said switch, and said method being practiced in one or more elements included in a set the includes said switch and said nodes.

18. A method carried out in an arrangement that includes a switch, and N collections, each collection i including a set of terminals T_i and a set of resources SOR_i, where each set of resources includes one or more serially-connected shared overloadable resources SOR_i^j interposed between term, j being index that identifies a particular shared overloadable resource in set SOR_i, and where each call that is established between a terminal in set T_i and said switch occupies an overloadable resource element, $SOR_i^j(q)$ in each resource j in set SOR_i, where q=1, 2, ... or Q^j, and Q^j is a number corresponding to number of shared overloadable resource elements in resource j, said method being carried out in response to an attempt by a terminal in set T_k to establish a communication connection with said switch, comprising the steps of:

determining, with respect to each SOR_k^j, for all indices j that are valid for set of resources SOR_k, whether a number of unoccupied overloadable resource elements is below a respective first preselected threshold $K1^j$;

when said step of determining concludes that number of unoccupied overloadable resource elements in some SOR_k^p, where p is some valid index value in set of resources SOR_k, is below preselected threshold $K2^p$, engaging a mechanism that works to maintain a high probability that an element $SOR_k^p(q)$ exists that is unoccupied; and

establishing a connection for said terminal in set T_k, unless said mechanism chose to block said attempt.

19. The method of **18** where said serially-connected shared overloadable resources comprise one or more links, with nodes interposed between links, with one of said links connected to said switch, and said method being practiced in one or more elements included in a set that includes said switch and said nodes.

20. In an arrangement that includes a switch, and terminals that are coupled to the switch through a serially-connected arrangement of one or more shared overloadable resources, where each call established by said switch for a terminal belonging to said terminals occupies a portion of each of said one or more shared overloadable resources, and where each of said overloadable resources has an associated preselected number of channels, **a method** carried out when a terminal of one of said terminals goes off-hook to signal that it seeks to establish a call through said switch, comprising the steps of:

selecting an unconsidered one of said shared overloadable resources in said serially-connected arrangement, as a considered resource, for an assessment as to whether number of channels that are unoccupied on said considered resource falls below a preselected threshold;

(a) when said assessment concludes that said considered resource falls below said preselected threshold,

(b) engaging a mechanism that decides, based on prearranged criteria, whether to drop a call, and executes on it decision, and

(c) establishing said call for said off-hook terminal, unless said mechanism chose to drop to call sought to be established by said off-hook terminal;

(d) when said assessment concludes that said considered resource does not fall below said preselected threshold, returning to said step of selecting as long as there is at least one unconsidered one of said shared overloadable resources, and advancing to step (e) when no unconsidered resources are left; and

(e) establishing said call for said off-hook terminal.

21. The method of **20** where said serially-connected shared overloadable resources comprise a one or more links, with nodes interposed between links, with one of said links connected to said switch, and said method being practiced in one or more elements included in a set the includes said switch and said nodes.